Appl. No.

: 10/671,179

Filed

: September 25, 2003

## AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently amended) A monitoring method comprising the steps of:

determining a relationship between a first <u>biological</u> property—of a tissue site, a second <u>biological</u> property <u>associated</u> with <u>said</u> tissue site and a compensated measurement—of said tissue site;

reading a primary input in communication with a first device responsive to said first biological property and a parameter input responsive in communication with a second device responsive to said second biological property; and

processing said primary input and said parameter input according to said relationship so as to output said compensated measurement.

- 3. (Currently amended) A monitor comprising:
- a[[n]] first input means in communication with a first device for determining [[a]] first biological property values associated with a tissue site;
- a second input means <u>in communication with a second device</u> for determining [[a ]]second <u>biological</u> property value<u>sassociated with a tissue site;</u>
- a compensation means for determining a relationship between compensated measurement values, <u>said</u> first <u>biological</u> property values and <u>said</u> second <u>biological</u> property values; and
- a processor means for deriving a compensated measurement of said first biological property from said first input means, said second input means and said compensation means.
- 4. (New) A monitor for compensating a first physiological property using a second physiological property, the monitor comprising:
  - a primary input in communication with a first device and responsive to a first physiological property;
  - a parameter input in communication with a second device and responsive to a second physiological property;
  - a compensation relationship of said primary input, said parameter input and a compensated measurement; and

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a processor configured to output said compensated measurement from said primary input and said parameter input utilizing said compensation relationship.

- 5. (New) The monitor of Claim 4, wherein said first property is dependent upon said second property.
- 6. (New) The monitor of Claim 4, wherein said first internal property comprises blood oxygen levels.
- 7. (New) The monitor of Claim 4, wherein said second internal property comprises pH.
- 8. (New) The monitor of Claim 4, wherein said second internal property comprises Hct.
- 9. (New) The monitor of Claim 4, wherein said second internal property comprises HbCO.
- 10. (New) The monitor of Claim 4, wherein said second internal property comprises MetHb.
- 11. (New) The monitor of Claim 4, wherein said compensation relationship comprises a calibration curve.
  - 12. (New) The monitor of Claim 4, further comprising an information element.